MIT's Oldest and Largest Newspaper

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The Tech
Established 1881

Volume 136, Number 28

Thursday, October 13, 2016

WEATHER, p. 2

THU: 67°F | 47°F
Chance showers

FRI: 58°F | 42°F
Sunny

SAT: 56°F | 41°F
Sunny

Holmström wins economics Nobel

Professor receives joint award for contributions to contract theory

By Kavya Ravichandran

Economics professor Bengt Holmström was awarded the 2016 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel alongside Harvard economist Oliver Hart for their work on contract theory.

"Modern economies are held together by innumerable contracts," said a press release from the Royal Swedish Academy of Sciences announcing the award. Contract theory provides "a comprehensive framework for analysing many diverse issues in contractual design."

Holmström's work on contract theory and the theory of incentives explains how contracts should be devised to maximize benefits for workers and corporations. Using a principal-agent model, his *informativeness principle* states how a contract should link an agent's pay to performance-relevant information.

"One of the theory's goals is to explain why contracts have various forms and designs. Another goal is to help us work out how to draw up better contracts, thereby shaping better institutions in society," the Royal Academies press release said. It can help answer questions such as: "Should providers of public services, such as schools, hospitals, or prisons, be publicly or privately owned? Should teachers, healthcare workers, and prison guards be paid fixed salaries or should their pay be performance-based? To what extent should managers be paid through bonus programmes or stock options?"

Holmström's research "holds real insights for business leaders everywhere, in every industry," Dean of MIT Sloan David C. Schmittlein told the MIT News Office. "He continues a long tradition of inventive economic thinking at MIT, and his ideas remain central to how we think about contracts and employee incentives."

"Bengt's foundational research in contract theory, which has provided practical tools for many areas of modern society, represents MIT's profound commitment to basic research that can generate new and deep understandings of the human complexities — the po-

Nobel, Page 7

ROBERT C. RUSCH–THE TECH

During the dedication of Building 2 last Friday, the statues of Mens and Manus walked along the recently renovated hallways.

Trump invokes MIT's Gruber during debate

Candidate was denouncing the ACA

By William Navarre
EXECUTIVE EDITOR

Republican presidential nominee Donald J. Trump roused the ire of economics professor Jonathan H. Gruber '87 by using the latter as a tool to attack the Affordable Care Act.

"You know that, because Jonathan Gruber, the architect of Obamacare, was said — he said it was a great lie, it was a big lie," Trump stuttered at the debate, invoking Gruber's name in front of an estimated 66 million television viewers.

Trump was referring to on-camera comments that Gruber made in which he said that it was lack of transparency that helped the Affordable Care Act pass.

"I'd rather have this law than not," Gruber said in the 2013 video taken at an academic conference, explaining that the alleged lack of transparency might be a necessary evil in order to allow the act to pass political muster.

Gruber no longer stands by his comments and told *The Tech* that Donald Trump did not characterize his view properly.

"I made a glib comment about the political process behind the passage of the ACA," he wrote in an email. "The comments were thoughtless and inaccurate and did not in any way properly reflect the enormously transparent process by which the ACA was passed."

Gruber was watching the debate live, but said he was so focused on the substance it took a minute for him to process that Trump had mentioned him during a presidential debate.

When it hit him, he said, he was torn between anger over his name being taken in vain and excitement that so many millions of people had heard his name.

"I received a lot of supportive emails from family and friends," Gruber said, reflecting on the reaction of those close to him.

In an apologetic written testimony that Gruber sent to the U.S. House's Oversight and Government Reform Committee in 2014, Gruber wrote that "It is never appropriate to try to make oneself seem more important or smarter by demeaning others."

Asked if Trump should let that apology be a lesson to him, Gruber said he thinks "that is the least of the lessons that Trump needs."

Gruber, who doesn't usually bother watching debates since he says they don't often provide new information, found this year's sufficiently important since Trump is the least politically experienced person to run for president in his lifetime.

With such an inexperienced candidate, he said, it's especially important that voters scrutinize his temperament, judgement, and intellectual abilities.

Gruber said that Trump "abjectly failed in the first debate" and "doubled down" in the second debate. He criticized Trump as having "no understanding of policy issues" and said he showed "no common decency or respect for the democratic institutions that make our nation so great."

While this is the first time Gruber was mentioned during a presidential debate, it is not the first time his name has been in the mass media.

The media latched onto the 2013 video, setting off a firestorm dubbed "Grubergate." That video likely gained much of its traction due to Gruber's referring to "the stupidity of the American people," though the context of that particular phrase suggested he may have been using it in jest.

Sprinkler causes flood in New House entrance

The latest water damage to New House was not caused by another burst pipe, as some residents feared, but by a sprinkler triggered when an air conditioning unit in the house manager's office overheated early Tuesday morning.

At approximately 4:30 a.m. Oct. 11, New House was woken by a fire alarm after the sprinkler began to discharge. Several inches of water flooded the entrance and approximately one third of the Arcade (the hallway connecting New House's six houses).

Students living in Houses 4, 5, and 6 were permitted back into the building within the hour; others had to wait longer.

House 1 was the only part of New House damaged by the water, House Operations Manager David Nunez wrote in an email to residents.

"I share your concern about possible leaks in New House, but I want to reassure you that the sprinkler head reacted to a heat source exactly as it was designed to do," Nunez wrote.

By 2 p.m. the following day, the sprinkler system had been repaired and contractors were on site removing water and completing clean-up.

This is the second time in three weeks that House 1 has faced water-related damages. On Sept. 23, leaks resulting from a loose screw in the overflow drain of a bathtub in iHouse, part of House 1, caused several ceiling tiles to collapse.

New House will close for renovations or demolition at the end of this academic year.

—Katherine Nazemi

Man found dead at PKT

A man was found dead at MIT's Phi Kappa Theta fraternity Sunday morning. He was a graduate student at a nearby institution of higher learning employed by MIT, a spokesperson for the MIT News Office said.

An investigation by the Boston Police into the cause of death is underway. According to 7News Boston, investigators believe there was no foul play.

"The Division of Student Life and Mental Health and Counseling are actively working to support PKT brothers who live in the house, as well as those brothers who live in on-campus housing," a statement from the MIT News Office said.

The spokesperson encouraged all members of the MIT community who feel affected by the death to access MIT student support resources at *resources.mit.edu/support.*

—Vivian Zhong and Katherine Nazemi

2.009 Build Challenge, p. 8

IN SHORT

The used bike auction organized by the MIT Police will be held at noon today, in the 290 Albany Street lot. Take your MIT ID and pay with cash or check.

PE registration closes at 1 p.m. on Wednesday, Oct. 19.

Family Weekend is coming up Oct. 28 - 29.

The MIT Press Bookstore moving sale is open from 10am-6pm. Until the sale ends on Friday, all books will cost $1 each.

Send news and tips to *news@tech.mit.edu.*

THE BIRTH OF A NATION
Heavy handed, alternating and conflicting scenes.
ARTS, p. 13

THE GIRL ON THE TRAIN
Jealousy, love, betrayal, and murder.
ARTS, p. 12

LISTEN TO HER
The unsung power of silence. **CAMPUS LIFE, p. 6**

IN THROUGH THE BACK DOOR
From community college student to full professor.
CAMPUS LIFE, p. 6

KNOW YOUR SPORT
Synchronization and trust in sailing.
SPORTS, p. 16

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WEATHER

Cooler weekend weather, warmer next week

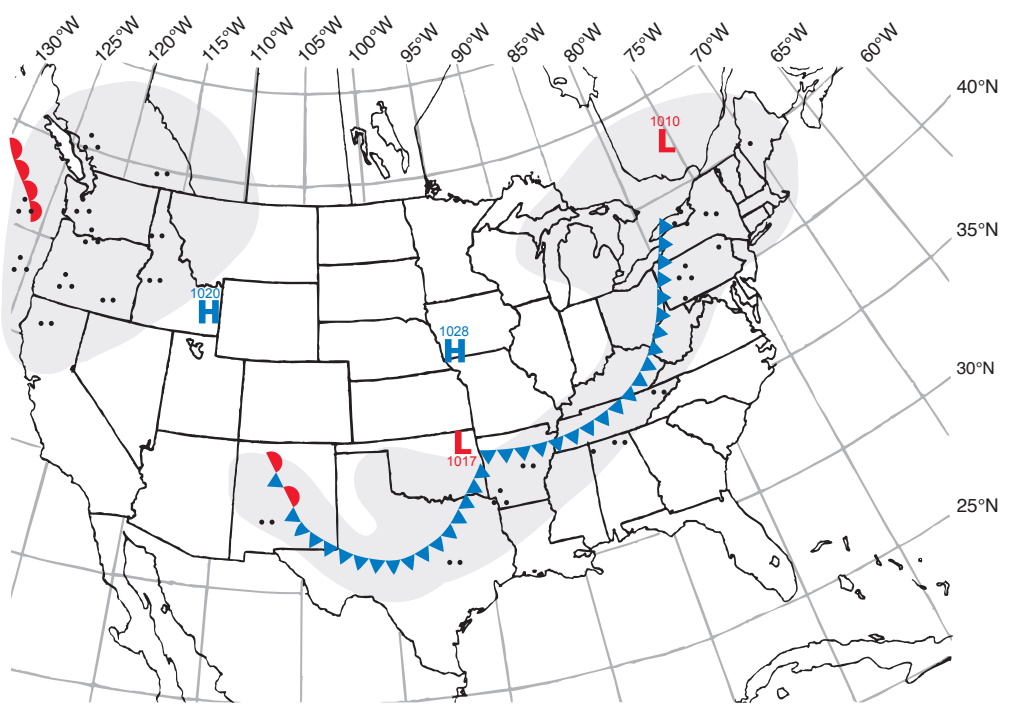
By Jordan Benjamin
METEOROLOGIST

An autumn front is poised to bring cooler temperatures and clear skies to New England this weekend. Following today's clouds and showers, cold crisp air will be ushered into the region on strong gusting breezes from the north and northwest. The cooler weather will be accompanied by strong high pressure and light winds that could allow temperatures to drop near or into the 30s F on Friday and Saturday nights.

Temperatures will then moderate, warming on Sunday into next week with highs in the mid 60s F. Elsewhere, across the central United States, several fall systems are poised to dip south and move east with cold fronts and cooler air. The first snows of the season have already occurred in the mountain west, and will continue to increase as fall progresses. In the Pacific Northwest, heavy rain from training low pressure systems will persist through the foreseeable future. In the tropics, Hurricane Nicole is expected to pass over Bermuda today before rapidly moving off to the northeast and weakening. It is not expected to be a further threat to land.

Extended Forecast

Today: Mostly cloudy with a slight chance of showers. High around 67 °F (20 °C) Winds south at around 10 mph.
Tonight: Showers ending late, then mostly clear. Low around 47 °F (8 °C) Winds W to NW at 10-15 mph, gusting to 30 mph.
Tomorrow: Sunny. High around 58 °F (14 °C). Low around 42 °F (6 °C). Winds NW at 10-15 mph, gusting to 25 mph.
Saturday: Sunny. High around 56 °F (13 °C) Low around 41 °F (5 °C)
Sunday: Sunny. High around 61 °F (16 °C)



Situation for Noon Eastern Time, Thursday, October 13, 2016

Weather Systems	Weather Fronts	Precipitation Symbols			Other Symbols
H High Pressure	Trough		Snow	Rain	Fog
L Low Pressure	Warm Front	Showers	✻ ▽	• ▽	Thunderstorm
§ Hurricane	Cold Front	Light	✻	•	Haze
	Stationary Front	Moderate	✻✻	••	Compiled by MIT Meteorology Staff and *The Tech*
		Heavy	⁂	∴	

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KENSHO

transform() the world to fit() the future

```
X = SparseAutoEncoder(num_hidden=10).fit_transform(features)
xycoords = TSNE(random_state=17).fit_transform(X)
DBS = cluster.DBSCAN().fit(X)
plt.scatter(xycoords[:, 0],  xycoords[:, 1], color=colors[DBS.labels_])
```

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Sudoku

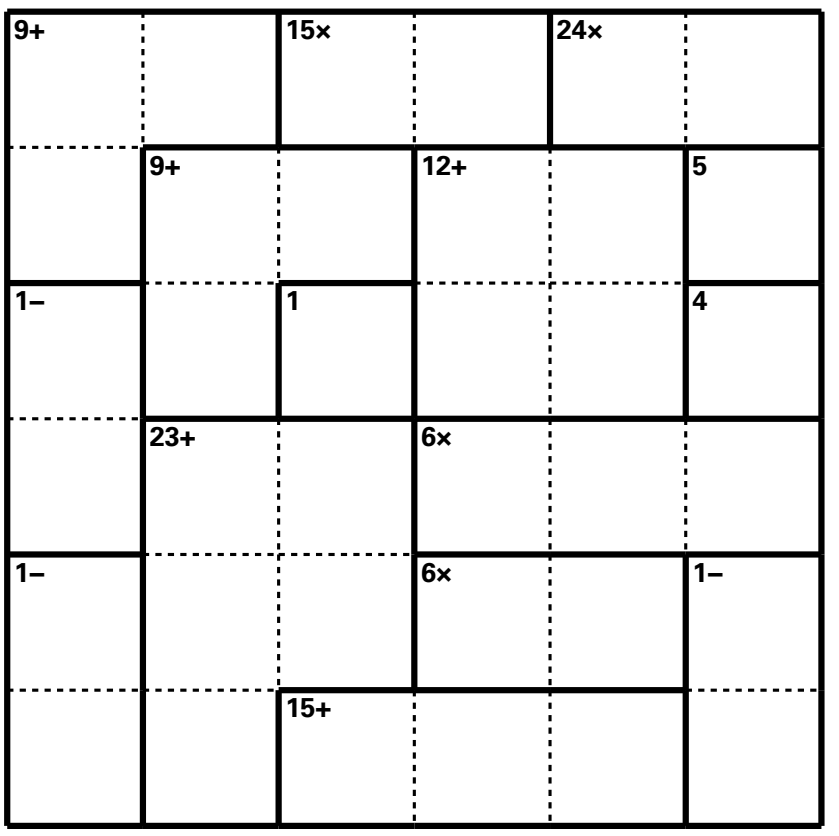
Solution, page 14

								5
9			6	8	7		3	
		4	5		2	8		
1	2		7				6	
4								8
	3				6		1	4
		8	2		5	1		
	9		1	6	4			7
5								

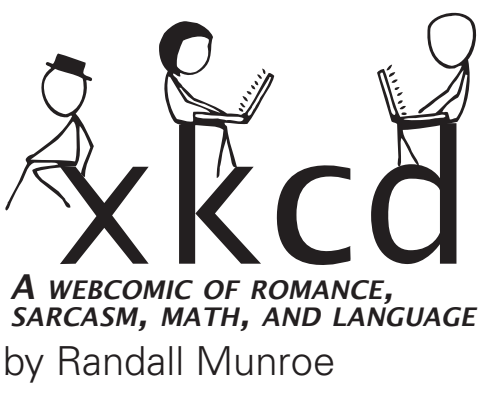
Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Techdoku

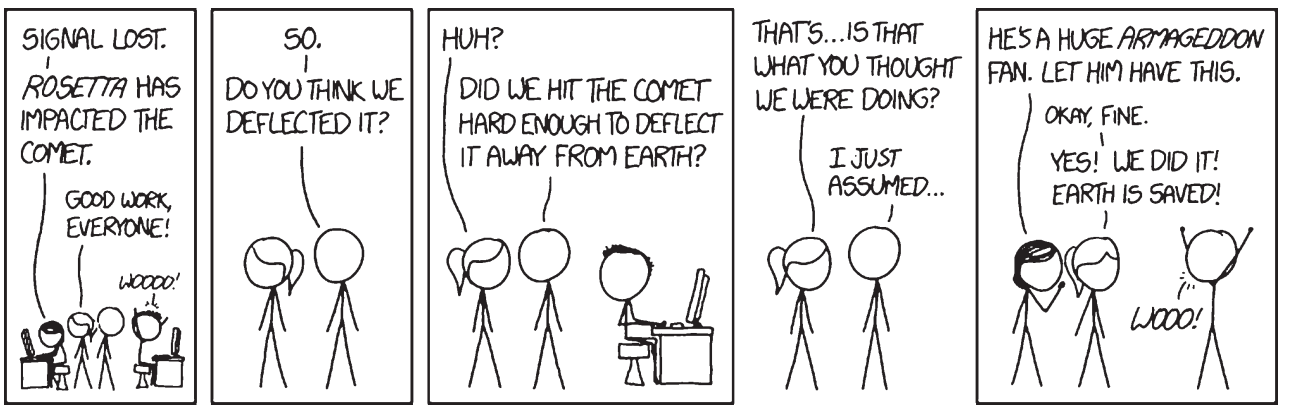
Solution, page 14



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.



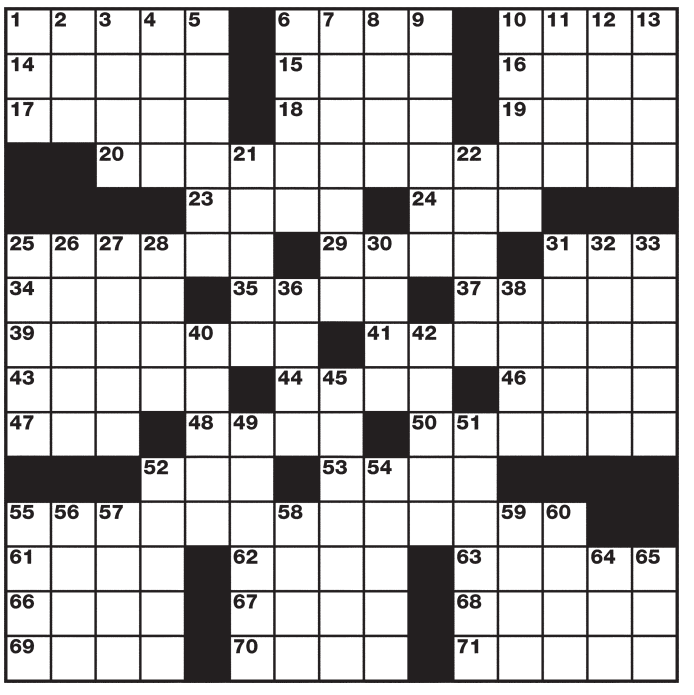
[1740] Rosetta



I WONDERED why he kept asking whether we thought the impact speed was too low.

Discovery Day by Billie Truitt

Solution, page 13



ACROSS
1 Facing the pitcher
6 Talon
10 Ticket remnant
14 Get to
15 Capital of Peru
16 __ measure (ruler on a roll)
17 Mediterranean nation
18 At any time
19 Barbell metal
20 He co-sponsored Columbus
23 Affectionate greeting
24 __ foo yung
25 Religious rift
29 Prefix for present
31 Actress Thurman
34 Weaving machine
35 __ Lisa
37 Rooftop wind gauges
39 With 41 Across, auspicious 1492 date for Columbus
41 See 39 Across
43 Oktoberfest dance
44 Tubular pasta
46 Swampy area
47 Blurt out
48 Clumsy person
50 Tune in
52 Dove sound
53 Motel furniture
55 She co-sponsored Columbus
61 Pre-owned
62 Ruckus
63 Didn't feel so well
66 Doing nothing
67 Therefore
68 Nominated for a post
69 Football throw
70 Offend the nose
71 Pulls along

DOWN
1 Upper limb
2 Herbal drink
3 Show reluctance
4 Start of a play
5 Word of gratitude
6 Musical symbols
7 Eats nothing but
8 From the US
9 Prison head
10 Bee attack
11 GWTW estate
12 Fully familiar with
13 Be flexible
21 "Leggo of that!"
22 Words of surrender
25 Spills over
26 Drink with marshmallows, maybe
27 In an angry way
28 "No harm done"
30 Actor __ Damon
31 Not qualified
32 London length measure
33 Pale with fright
36 Rice-shaped pasta
38 Charity
40 Burger topping option
42 Irish author Oscar
45 Employee's clip-on
49 Hang around
51 17 Across, for one
52 Hands over formally
54 Paperless novel
55 Witticism
56 Food safety org.
57 Skinny swimmers
58 Peeved
59 False witness
60 __ mater
64 Brain wave test: Abbr.
65 Drilling pro's deg.

FUNFUNFUNF

Listen to her

The undervalued power of peer support

By Linda Jing

She was lying to me. She was telling me that everything was fine, but her body was saying something else. She was forcing herself to be brave, to fake the courage we are all supposed to have.

I stood at the edge of her open door, and I had a choice. I could either take her answer as it was and pretend I didn't notice the discomfort, or I could ask her how she was really doing. I chose the latter, and to this day, I am so thankful for that decision.

How many times have you passed by someone you know today? How many times did you decide to ask them how they are doing? How many times did you bother to truly understand, beyond the typical "okay" or "fine"?

I'm guilty of being negligent, too. MIT drowns us in its business. Busy is good. Busy means you're doing important things. Busy means you're being productive and taking advantage of the opportunities. Busy is good.

I'm ashamed to admit this, but even though I asked her how she really was, part of me wasn't present. In the back of my mind, I was wrestling with my conscience. I was struggling to choose between helping the teary-eyed girl standing in front of me and going back to the crunch of finishing my two psets due the next morning. A little voice called "efficiency" was nagging at me, performing a series of optimizations to solve this problem as quickly as possible.

She had now invited me into her room. The voice of "efficiency" was becoming unhappy with me. *Now what have you gotten yourself into! You'll never be able to turn your psets in on time!* But my sense of obligation told efficiency to back off. *You can't just leave her hanging there. You have to help her.*

But what should I say? I turned inward momentarily, staring at the floor. I remembered that when I was sad, I hated when people asked me, "Are you okay?" Wasn't it obvious that I was sad? I couldn't bring myself to ask her that.

> **I was struggling to choose between helping the teary-eyed girl standing in front of me and going back to the crunch of finishing my two psets due next morning.**

I was now feeling forced into this state of unknowns, and I knew that it was wrong. Why did I feel like helping her was an obligation? I wanted to be there for her, but I was unwilling to make the sacrifice. I was selfish.

The growing awkwardness in the room compelled me to speak. "Thank you for letting me in. Let's sit down and talk for a bit?" Her eyes brightened. She clearly wanted me to stay. She wanted my help.

We were silent then. We sat in silence for what seemed to be an eternity. The clock was screaming against the quiet with its ticks and tocks. My mind was, too, but it forgot how to put words into sentences. My mind wanted me to do something. Maybe I should boil some hot water and make her some tea. Maybe I should grab the pack of seaweed snacks from my room and share that with her. I was searching for something to break this silence. Anything. To me, the silence was awkward. I didn't know how to find peace with the quiet, so I wanted to fight against it.

The only thing that prevented me from running around haphazardly to make her feel more comfortable was that she didn't seem to think it was awkward. So I fought my inner voice and sat in the silence that I thought would never end.

Then she gave me a hug and thanked me.

Why did she thank me? I hadn't done anything useful. At least, that's what I thought. I later learned that she loved the silence from that moment. The silence was beautiful. The silence brought a sense of peace and calm she hadn't felt in a really long time. She didn't care that we weren't saying anything. The mere presence of having someone beside you, knowing that she took time to be with you, was more than comforting. And I listened. I listened to the initial shortness of her breath, and how it calmed to slower, longer durations. Just by being there, I was bringing light to the dark tunnel she was stuck in. I didn't realize I was capable of doing that, and it was enlightening to see that it was within my power to drastically improve someone's day.

I've realized that you can't be efficient with people. You have to be present.

Looking back, I was scared that I had to do a lot to help someone, but I didn't have to do much at all. All I needed to do was listen, process what they were saying, and be there for that person. Whoever comes to you for help is in a hurricane, and the best thing you can do is offer her a shelter of warmth and love.

Listening can work miracles.

Linda leads Lean On Me, an anonymous peer supporter network. To learn more and get involved, visit http://lean0n.me/

In through the back door

From community college student to tenured professor

By T.L. Taylor

Editor's note: This article is the first in a series about members of the MIT community with working-class backgrounds. Comments, questions, and submissions are welcome at cl@tech.mit.edu.

I remember hearing over the years how people felt once they got tenure. A sigh of relief, a feeling of recognition, the sense they had made it, that they were somehow now okay.

I never felt that.

Those who knew me well would reassure me (so many times over the years) that I'd done it, that I wouldn't be fired at any moment, that I'd jumped the hoops correctly (many of us know imposter syndrome all too well). But it never "took," and I never felt what people described.

"In through the back door" is how I've always felt about my academic path. Though I've been lucky to land on my feet (and I do mean to invoke luck, very explicitly), my life as an academic has always felt, at least psychologically, pretty precarious.

> **I didn't know how to think, talk, or ask about my future. I graduated, moved out, and got a job as a graveyard waitress at Denny's.**

However, the more I work with first-generation college students, the more I want to reassure them that such feelings are normal and that we don't all come to the university through traditional paths. I increasingly think that making a range of experiences visible is important, and I'm fortunate to not feel as vulnerable as I once did.

I'm from a white working class family. My father graduated high school and was a machinist, then house painter, then janitor/maintenance worker. My mom dropped out of school as a teenager but went back and finished as an adult after many odds-and-ends jobs. Though I was a good (if undirected) student when I was young, when I was 12 and a half my mom died, and life kind of went off the rails.

Junior high and high school mostly became about hanging on just enough. I got funneled into home economics and stenography and working at the campus convenience store. I got sent out to the VA hospital to learn how to file. I never took the SAT.

The early elementary school kernel of being deemed "smart" (mostly because I read books and tested okay) was ultimately quite fragile, lost as a variety of other structural factors came to the foreground. I didn't know how to think, talk, or ask about my future. I graduated, moved out, and got a job as a graveyard waitress at Denny's.

It was only after an older woman I respected told me I should try to "do something with my life" that I ended up seeing what my local community college, Chaffey (in Rancho Cucamonga, California), could offer. I figured I could take a class or two during the day while I worked at night.

Community college became one of the most important experiences of my life. Though I kept waitressing full time to make ends meet, that shot at college changed my path.

The community college system in California gave people like me another chance at education. Not only did I receive encouragement and praise for my inquisitive nature, I gained exposure to topics I'd never encountered before (for example, sociology, the field I went on to specialize in). I got health care through the medical office on campus. I got small subsidies to buy my books.

I got the kind of mentorship that happens when you run into a professor in the corridor and the following conversation occurs:

"Are you applying to Cal?"

"Yeah, Cal State Fullerton."

"No, Cal. UC Berkeley."

"What is that?"

...and the explanation and advice that follows.

I eventually ended up at UCB thanks to the state system that intentionally creates transfer paths for students like myself and keeps them affordable.

It's hard to trace your trajectory somewhere. It's too easy to fall into clichéd meritocratic myths, to forget your privilege. Though I was raised in a working class household, my whiteness was always a non-trivial part of my opportunities.

Remembering all the small pivots, and missed ones, that make up the whole is an impossible task. The truth is much messier, tangled up with chance and effort and privilege and any other number of variables that simply can't be pulled apart.

CV's hold stories in truncated, telegraphed form. When I was promoted to full professor last year, it got me thinking about adding my community college experience to my CV. When I told a few of my students about my plan, their cheers of encouragement made me smile, even feel proud, and I was buoyed by their enthusiasm for sharing that part of my trajectory.

DAMIAN S. BARABONKOV

T.L. Taylor

In an era where online education is touted, my community college experience remains for me a powerful reminder of how important our everyday face-to-face connections, and the support structures that touch many aspects of our lives, can be (from educational to medical to financial).

> **It's hard to trace your trajectory somewhere. It's too easy to fall into clichéd meritocratic myths, to forget your privilege.**

In a moment of growing economic disparity, the second chance offered to folks like myself — one that didn't leave me overly burdened with debt for an undergraduate education — seems even more critical to preserve.

And while a classic liberal education seems under constant threat from the push to instrumentalize learning for narrow job purposes, being exposed to a range of subjects and ways of thinking — many of which I never encountered in high school — was hugely important for my own development. A liberal arts education is something even working class folks deserve.

Though I probably will always feel some sense of having come in through the back door, never totally at ease in the professional world in which I find myself, I want to make visible these diverse paths and cheer on those who take them. I can't untangle my own path fully, but one thing I can do is put my community college experience on my CV. I've left it off for far too long.

T.L. Taylor is a professor in the Comparative Media Studies/Writing department.

Contracts resolve conflicting interests

Holmström is 22nd MIT affiliate to win a Nobel prize in economics

Nobel, from Page 1

litical, cultural, and economic realities that shape our existence," Melissa Nobles, Dean of MIT's School of Humanities, Arts, and Social Sciences, said.

Holmström and Hart are close friends who have worked largely in parallel, occasionally publishing together. Hart himself was a professor of economics at MIT from 1985 to 1993. They will share the prize of 8 million Swedish krona, roughly $925,000.

"I'm so glad that I won it with [Hart]," Holmström said. "He's my closest friend here, and you know we have worked together and talked together over the years, and he has been a great inspiration for my research."

Holmström received his PhD from Stanford University's Graduate School of Business in 1978. He served as an associate professor at the Kellogg Graduate School of Management at Northwestern University, and Edwin J. Beinecke Professor of Management at Yale University's School of Management. He joined MIT in 1994, where he is currently the Paul A. Samuelson Professor of Economics.

Holmström is the fifth person to win the Nobel while a member of MIT's Department of Economics, President L. Rafael Reif wrote in an email to the MIT community. He follows Nobel laureates Paul A. Samuelson (1970), Franco Modigliani (1985), Robert M. Solow (1987), and Peter Diamond (2010). An additional 10 MIT alumni and seven former MIT faculty have won the Nobel Prize in economic sciences, and 87 people affiliated with MIT have won Nobel prizes overall.

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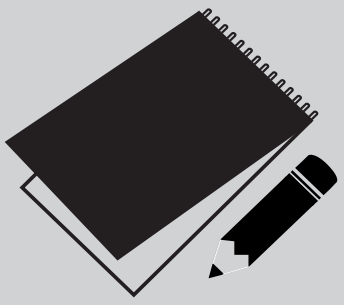

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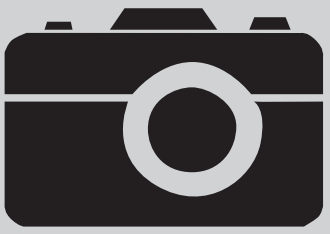

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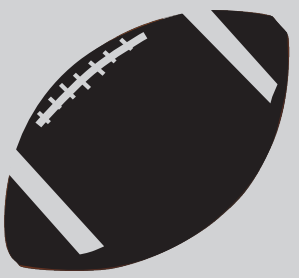

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Blindspot: Hidden Biases of Good People

Mahzarin R. Banaji

Richard Clarke Cabot Professor of Social Ethics at Harvard

We all have blind spots: subtle cues that influence our perceptions and our interactions with others. Prof Banaji's best-seller *Blindspot: Hidden Biases of Good People* will be the basis for a workshop intended to help community members probe their own blind spots. Register by October 14 for a free copy of *Blindspot*, courtesy of the Division of Student Life and the Institute Community and Equity Office.

Credit: Stephanie Mitchell, Harvard University News Office

MIT community members are welcome. Reserve a seat and request a book at tickets.mit.edu.

Thursday, November 17
12:30 - 3:00 PM
MIT Walker Memorial (Building 50)

MIT | Division of Student Life

MIT | ICEO / Institute Community & Equity Office

ANYA R. QUENON

Khan V. Nguyen '17 cheers with members of the silver team.

ANYA R. QUENON

Tate E. DeWeese '17 cheers while in a chicken suit.

ANYA R. QUENON

Two members of the pink team use their hands to roll themselves back to their team's starting line.

ANYA R. QUENON

The blue team celebrates winning the spirit award.

DAMIAN S. BARABONKOV

Members of the orange team operate their contraption back to the starting line.

ANYA R. QUENON

The red team races to place their last fish on the pole.

2.009 Build Challenge

ANYA R. QUENON

Members of the red team maneuver their contraption back to their team's starting point.

ANYA R. QUENON

The orange team celebrates winning first place.

ANYA R. QUENON

David Wallace announces the winner of the 2.009 Build Challenge last Friday.

ANYA R. QUENON

Two members of the silver team are cheered on as they race to rescue their last fish.

THEATER REVIEW

Oh, What a Night!

High-energy cast of *Jersey Boys* brings Broadway to Boston

JEREMY DANIEL

L to R: Keith Hines, Matthew Dailey, Aaron De Jesus, and Cory Jeacoma.

By Tara Lee
ARTS EDITOR

My first encounter with *Jersey Boys* was when I watched the Tony Award-winning musical's movie adaptation on a plane. Squished in a middle seat and crouched over the tiny airplane screen, I fell in love with the catchy tunes and captivating true story of The Four Seasons band. For nearly a week afterward, my Spotify playlist was comprised entirely of the *Jersey Boys* soundtrack, and so you can imagine my joy when I finally got to see these characters and songs come to life on stage.

It's one of those musicals that'll have you humming its tunes all week long. Packed with energy and addicting melodies, *Jersey Boys* recounts the rise of one of America's most beloved bands from the 1960s, The Four Seasons. Of course, it's not just a simple tale about hard work that paid off, but rather, a Broadway version of all the failed attempts, the Italian mobsters, the love, and the death that was involved in their journey.

The first act is essentially a continuous stream of songs that detail the formation of the group and highlight their first hits. We're introduced to teenage Frankie Valli (Aaron De Jesus), who joins the band as the lead singer after being discovered by Tommy DeVito (Matthew Dailey). Frankie Valli's signature falsetto voice is beautifully portrayed by De Jesus during his first few songs, "I Can't Give You Anything But Love," and later, "My Mother's Eyes." At first, it's a wonder how high his range went, but after a few songs, I got used to it and just could not take my eyes (or ears) off him.

As a nod to the name of the band, the musical is segmented into four seasons, each narrated by a different member of the band talking directly to the audience. During "Spring," we're introduced to Bob Gaudio (Cory Jeacoma), a young songwriter who joins to give their music a fresh makeover and provide backup vocals and keyboard. Jeacoma's fluid voice provides a gorgeous balance to the uniquely high-pitched voice of De Jesus's character. Soon after Jeacoma's character is introduced, the band catapults into one of the highest points of their career. One after another, we hear their top hits, "Sherry," "Big Girls Don't Cry," and "Walk Like a Man," and the energy in the audience quickly rises. We're cheering them on from our seats, rooting for them to keep their fame growing.

Of course, it's not all sunshine and roses, and at the start of the second act ("Fall"), bassist Nick Massi (Keith Hines) takes over the narration, and we're led around the rougher edges of the band members' lives. The tone of the second act is noticeably subdued, and the songs become a bit more somber, my favorite of them being "Can't Take My Eyes Off You."

It should not be surprising that a musical titled *Jersey Boys* features an almost entirely male cast — only three girls, Kristen Paulicelli, Leslie Rochette, and Jesse Wildman, who portray various high-pitched, Jersey-accented female characters throughout the show.

Other notable aspects of the performance included the incredible live on-stage drumming throughout the musical numbers, and detailed acoustic effects. In one of the early scenes when Frankie is singing in a church, his voice "echoes" and bounces as if he were standing under a vaulted ceiling. The only questionable aspect of the performance was the LED screen that would randomly show cartoon-like pictures related to what was happening on stage.

Nevertheless, this touring crew of *Jersey Boys* is a delight for the ears and the eyes. They are opening up Broadway In Boston's 2016-2017 season, and even if you don't think you would enjoy music from the 1960s, I'd give this show a chance.

Jersey Boys
Directed by Des McAnuff
Music by Bob Gaudio
Lyrics by Bob Crewe
Boston Opera House
Oct. 5 — Oct. 16

MUSIC REVIEW

Ólafur Arnalds – *Island Songs*

An ambitious multimedia project from the prolific Icelandic musician

By Denis Bozic
STAFF WRITER

Seven years ago, Icelandic multi-instrumentalist Ólafur Arnalds — who was just starting to receive widespread acclaim at the time for his solo work — released a collection of tracks titled *Found Songs,* which consisted of seven compositions that were recorded daily for seven days and immediately released online. Only two years later, Arnalds released a similar project, *Living Room Songs,* for which he recorded, filmed, and published a new song each day for a week in his living room.

Following these two projects, the next five years quickly catapulted Arnalds to international recognition for his numerous collaborations and additional musical work, such as *Trance Frendz,* an improvised album with the German musician Nils Frahm, and the BAFTA-winning score for the TV series "Broadchurch." It therefore seems only fitting that, seven years after *Found Songs,* Arnalds returns with *Island Songs,* a more mature and intricate multimedia project that follows Arnalds as he travels around Iceland for seven weeks to record and film seven songs in collaboration with different Icelandic artists.

A step up from *Found Songs* and *Living Room Songs,* this project showcases Arnalds at his best as he pushes his boundaries as a composer to highlight lesser-known aspects of Icelandic artistry and culture, from poetry and choirs to close-knit communities in remote places of the island. The unwavering commitment to the purpose of the project, showcased through Arnalds' demanding back-to-back cross-country travels, is clearly reflected in the final outcome – with a runtime of only half an hour, *Island Songs* succeeds at bridging the essence of his music with the cultural identity of his own country.

This effect can already be seen in the opening track, "Árbakkinn," featuring Einar Georg Einarsson, a poet and retired teacher from Hvammstangi, an Icelandic village in the northwest part of the island. Layered with the piano- and strings-driven undertone of Arnalds and his band, Einarsson's contemplative recitation of one of his poems sets the melancholic and delicate mood of *Island Songs*, characteristic of Arnalds' music. At the same time, the poem, which describes a river close to a farm where Einarsson grew up, paints a vivid landscape of Iceland's iconic, unadulterated nature.

A similar effect can be felt in "Raddir," the third track of the project, for which Arnalds teamed up with conductor Hilmar Örn Agnarsson and composer Georg Kári Hilmarsson, who helped him produce a celestial composition for the South Iceland Chamber Choir. This was Arnalds' first time writing choir music, and the resulting piece is unquestionably astonishing. A three minute-long, otherworldly harmonization of icy female vocals and ethereal male vocals, "Raddir" successfully depicts the communal and sacred relationship between the choir and Strandarkirkja, the church where the video for the track was also filmed.

Of course, the project would not have been nearly as captivating if it hadn't been for the cinematographic contribution from the Icelandic film director Baldvin Z. During the development of the project throughout the summer, each track was released with an accompanying music video that accentuated a specific storyline. For instance, in "1995," a result of collaboration between Arnalds and his cousin Dagný Arnalds, the music video starts and ends by focusing on her two children as they run and play around Holtskirkja, once again emphasizing the familial experience of close-knit communities around the island. None of the scenes in the video seem superfluous; in fact, each of them helps encapsulate the song into the grander narrative of the project.

Even though *Island Songs* can be seen as a product of Arnalds' unrelenting desire to grow as an artist, it is perhaps his most selfless work so far. The collaborative nature of the project highlights the unique talents that each contributor brings to the recording sessions, effectively moving Arnalds away from the spotlight and allowing others to color his music with their own identities. In that sense, *Island Songs* is not simply Arnalds' artistic interpretation of his environment, but rather a multifaceted vision of Iceland and the disparate, yet densely intertwined, stories of those who created the world around him.

Writer's note: Island Songs can be streamed on Spotify or bought on iTunes and Amazon, while the physical version of the entire collection, along with a one-hour music film, will be released on October 28.

Island Songs
Ólafur Arnalds
Released Oct. 28, 2016
Mercury Classics

COURTESY OF MARINO THORLACIOUS

Island Songs, the new multimedia project by multi-instrumentalist Ólafur Arnalds, explores the lesser-known cultural aspects of Iceland.

ALBUM REVIEW

Regina Spektor's *Remember Us to Life*: Some pretty good shit-ake

Spektor's new album is like a mushroom

★★★☆☆

Remember Us to Life

Regina Spektor

September 20th, 2016

Warner Bros., Sire

By Ka-Yen Yau
STAFF WRITER

While chatting with my friend about Regina Spektor's new album, *Remember Us to Life*, I commented that I found it neither extraordinary nor particularly memorable. I did not really care for it at first, but after the third or fourth listen, I thought that it might be starting to grow on me, to which her response was, "Huh, kind of like a fungus."

Even though she was just joking, the more I think about it, the more I see that *Remember Us to Life* truly is like a mushroom. Allow me to elaborate:

Regina Spektor has been a staple within my playlists for a good many years now. I can (badly) sing along to the majority of her previous three albums, *Begin to Hope* (2006), *Far* (2009), and *What We Saw from the Cheap Seats* (2012). What distinguishes Spektor's music is her massive vocal range, her fearlessness to utilize unorthodox vocal techniques, and her uncanny ability to evoke feelings and memory through sound, whether it be wistfulness or whimsy.

Unfortunately, her new album, released on Sept. 30, 2016, is a departure from the high standard that was set by her previous three albums. Spektor's usual quirkiness is tamer; her voice and music is constrained by an attempt align with the conventions of pop music.

Her use of repetitive beat progressions and plain vocals end up being awkward and disjunctive rather than catchy. "Bleeding Heart," the first song of her album, flops back and forth between being a pop song and a rock song and uses the word "never" 57 times, creating a clunky and disruptive track. Even more cringe-worthy was "Small Bill$," whose all-too-many wispy sounding *la*'s and pseudo-rap verses were reminiscent of the worst parts of Gwen Stefani and M.I.A. This stylistic evolution is a disservice to Spektor's sound; it is a reduction in the quality, uniqueness, and charm of her music, and it squanders her vocal capability. To find that Spektor's delightful quirkiness was replaced by a failed attempt at being pop was an unpleasant surprise and a warranted disappointment, quite like the feeling of realizing that when you ordered a beefsteak, you were going to get the mushroom instead of an actual steak.

Regardless, the album did have a few great tracks scattered throughout (like truffles within a sea of portabella). She proves with her song "Obsolete" that she is still able to convey emotion through her music as eloquently as before. In this song, she asks "What am I? Why am I / Incomplete? / Obsolete?", questions of our own existence and self-worth that have likely appeared, at one point or another, in all of our minds. Her powerful crooning, backed by an escalating rush of string instruments and the constant rhythmic thuds of a piano, convey the desperation, sorrow, and defeat that accompany these thoughts.

Similarly, "Tornadoland," a song that likens one's internal turmoil and anxiety to a tornado, employs powerful auditory imagery on par with her previous works. The rapidly paced lyrics, her spiraling vocals, gusts of wind in the background, and the dramatically elevating instrumentation all help the listener really feel like they are caught right within the chaos of an actual tornado.

The songs on *Remember Us to Life* are an investigation of the disillusionment that accompanies life's struggles, growing up, and self-doubt — a dialogue that all her listeners can take part in. Her songs grapple with the process of understanding the unfairness of a flawed world ("The Trapper and the Furrier" and "Sellers of Flowers") and coming to terms with one's own imperfections ("Obsolete"and "Older and Taller"). Many of these songs, although addressing the melancholy topic of decay (of preconceived notions or of the body and mind), contain an upbeat and lively tone. Just as a mushroom draws its life from fecundity and decay, Spektor, by maintaining a contrast between her songs' themes and delivery, both subverts expectation and instills an underlying idea that through one's struggles, there exists a "beyond" where there is hope and new life.

Although not many of the songs from Regina Spektor's new album are going to make their way into my playlist, the album has slowly grown on me. The overall message of this album is one that I can appreciate, and I have already found myself subconsciously humming a couple of its songs. Like a fungus, indeed.

MOVIE REVIEW

Deadpan comedy mashup of the classic coming-of-age story mostly succeeds

Girl Asleep turns growing up into a nightmarish yet oddly humorous journey

★★★☆☆

Girl Asleep

Directed by Rosemary Myers

Starring Bethany Whitmore, Harrison Feldman, Matthew Whittet

By Krystal Lai

Being a teenager is hard. While experiences may vary for each individual, most are at least familiar with the idea of the angst-ridden, hyper-aware emotional upheaval that the stereotypical adolescent experiences. It is precisely this almost indescribable internal journey that director Rosemary Myers attempts to depict through her eccentric feature film debut, *Girl Asleep,* set in the bell-bottom jeans and high-waisted shorts era of 1970s Australia.

The film is heavily influenced by director Wes Anderson's penchant for symmetrical shot composition and a bold color palette. This becomes immediately apparent in the film's opening scenes, which involve two awkward youths dressed in solidly colored yellow and red uniforms sitting on a perfectly centered school bench. The characters' incongruent mannerisms and nonchalant deliveries are characteristic of an Anderson film. Myers uses this as inspiration for her own creation of a fun and absurd cinematic spin on reality. Events taking place on Feb. 31 and other bizarre inconsistencies provide comic relief and allow for a heightened suspension of disbelief because the premise of realism is never actually established.

The two youths who are first introduced are the exceedingly normal new girl at school, Greta Driscoll (Bethany Whitmore), and the verbose and socially awkward Elliott (Harrison Feldman). The two eventually become close friends and are faced with the usual teenage mean-girl drama which is satisfyingly portrayed by a pair of tall, icy-eyed twins, and an exceptionally catty bully.

For the first half of this film, *Girl Asleep* rides the same wave of teenage gawkiness and embarrassment that once propelled *Napoleon Dynamite* to cult stardom. The melding of deadpan humor with an aggressive use of awkward pauses and silences creates lighthearted unease that seems novel at first but quickly wears thin after repeated overuse. Eventually, these scenes become rather flat-footed and slow. Actual verbal or situational humor is not frequently used, with the film choosing instead to rely more on visual gags, exaggerated caricatures, and uncomfortable silences.

The real problem arises for Greta, a wallflower on the cusp of turning 15, when her parents decide to invite all of her classmates to a groovy, disco-themed birthday party. Matthew Whittet and Amber McMahon successfully portray Greta's parents as charming 1970s caricatures of the meddlesome parent stereotype. The headband-wearing Janet (McMahon) pedals furiously on her stationary living room bicycle while lecturing Greta, and Conrad (Whittet) launches into cheesy dad-jokes at the dinner table to a chorus of exasperated groans. The overall performances in the film seem a tad over-acted, but this style parallels the eccentric personality of the film's visuals and pacing, thus further establishing its idiosyncratic feel.

With her birthday party looming as a physical manifestation of her social anxieties and fears, she is forced to come to terms with her underlying internal reservations toward adolescent changes through an extended dreamlike sequence that blurs the line between reality and fantasy. As Greta takes a jarring plunge into the world of the creepy, the uncanny, and the symbolic, the film pivots 180 degrees. It takes on a darkly suspenseful and frightening atmosphere as Greta enters the metaphorical forest that seems to represent her journey toward understanding her new adolescent self. Unfortunately, too many sudden shifts back and forth between eerie anxiety and poker-faced humor leave the viewer with tonal whiplash.

The film's artistic representation of the intangible emotional journey is admittedly powerful and carefully crafted with meaningful symbolism and references to characters from her real life that paint a relatable depiction of the adolescent experience. It seems strange though that a film that attempts to most accurately portray the darkness and struggles that plague adolescence would choose to tie up loose ends and remedy all broken relationships so neatly and perfectly in the last ten minutes.

Girl Asleep has its strengths andis a great movie for viewers seeking a mix of deadpan humor, 1970s Australian culture, metaphors for the adolescent experience, and creepy childhood nightmare fuel. However, for those who aren't, skipping this film is no great loss.

SHANE REID

Elliott (Harrison Feldman) and Greta (Bethany Whitmore) in Girl Asleep.

ARTS ARTS ARTS

ARTS ARTS ARTS

MOVIE REVIEW

Powerful, but at times heavy-handed, *The Birth of a Nation* succumbs to its flaws

Overshadowed by personal controversy, director Nate Parker's new film is still a valiant effort

★★★☆☆

The Birth of a Nation

Directed by Nate Parker

Starring Nate Parker, Armie Hammer, Aja Naomi King, Jackie Earle Haley, Penelope Ann Miller

Rated R

Now Playing

JAHI CHIKWENDIU COURTESY OF TWENTIETH CENTURY FOX FILM CORPORATION

Nate Parker as Nat Turner in *The Birth of a Nation*.

By Vivian Zhong
STAFF WRITER

The Birth of a Nation depicts the story of Nat Turner (Nate Parker), a Bible-educated slave who comes to believe that he is a messenger of God, destined to lead his fellow slaves in a rebellion for freedom. I don't think it's much of a spoiler to say that the rebellion failed.

This wide-screen depiction of this historical figure's life is a slow and sprawling tale that relies heavily on dramatic imagery to conjure up an impression of grandeur and spirituality. Many scenes simultaneously induced a gasp of awe and a sigh of exasperation. Awe, for the intriguing double meanings in the oft-cited Biblical verses and the most glorious shots of cotton fields that you will ever see — but exasperation, for a consistent trend of being rather too on the nose. The film holds nothing back in exploiting your heartstrings and your conscience, shoving violence and heinous injustices in your face.

The opening scene, which I initially found random and puzzling, encompassed and set the stage for the feel of the rest of the film. In a short prologue sequence, a young boy is declared to be some sort of chosen one by a sage leader in a nighttime, fire-lit ceremony because he has a row of three bumps on his chest. It's evident that the young boy is Nat Turner, but the significance of the scene isn't clear.

At the same time, the chanting and the flames are entrancing enough that I didn't find myself particularly disgruntled. This sort of inconsistency in quality is itself quite consistent throughout the movie.

Looming over the entire movie is the shadow of the real-world controversy over director Nate Parker's alleged 1999 rape of a classmate. I was, and still am, thoroughly convinced that by today's standards he would have been found guilty; I say this only to explain how my convictions focused my attention on troubling themes that may otherwise have slipped my notice.

For all the emphasis placed on Nat Turner's relationship with Cherry (Aja Naomi King) being a driving influence in his decision to rebel, Cherry has little self-determination in the movie. She spends most of her screentime as a victim or being saved by Nat — or both.

She's a beloved symbol to be protected, revered, and revenged, but not to be informed or consulted. On the eve of the rebellion, a fellow slave warns Nat that should he lead a killing of slave owners, vengeance would fall upon those close to him, namely Cherry, their daughter, and Nat's mother. Nat's response? "If it's God's will."

Without warning them, Nat presumed to decide their fates on their behalf.

The large majority of the runtime is spent on build-up toward the rebellion for which Nat Turner is remembered in history books, which was appropriate, given the brevity of the rebellion itself.

Throughout his life Nat Turner is "special." His mistress recognizes a rare talent in him as a young boy and teaches him to read the Bible. He eventually memorizes it and preaches it frequently to his fellow slaves. By the time he becomes an adult, now owned by his mistress's son Sam Turner, Nat is famous enough for his Biblical fluency that other slave owners are willing to pay Sam to have Nat preach to their own restless slaves. Sam, drowning in debt, agrees.

In the beginning, Nat willingly recites Bible verses that justify slavery in his sermons. The most personally astonishing was 1 Peter 2:18 — "Slaves, in reverent fear of God submit yourselves to your masters, not only to those who are good and considerate, but also to those who are harsh."

For the most part, Sam is a "good and considerate" master, and Nat is every inch the obedient slave. But over the years, he witnesses the violent actions of "those who are harsh" against fellow slaves, against his family, and eventually against himself; it is then that he comes to realize that he has interpreted the Bible all wrong. It is mostly for those actions, including but not limited to forced teeth-pulling, knee-breaking, whipping, and rape, that the movie is R-rated.

For every gory scene of cruelty that forces your eyes shut, however, there is a scene of sublime beauty that widens them. There are the aforementioned shots of cotton fields, ironically lit in golden, elysian light; there is the perfect, candle-lit nuptial night shared by Nat and his wife; and there is an eerie, stunningly filmed tapestry of Nat Turner's black silhouette on a horse in the dead of night, with white moonlight suffusing the forest backdrop. For these alone, it was worth the trip to the movie theater.

The sublimity of the visual imagery couldn't completely distract from how frustratingly heavy-handed the directing could be. By the time Nat Turner embraces his perceived destiny as a new messiah, the frequency of heavenly motifs had increased to the point where I couldn't help but mentally quip "Hi, Jesus!" in scenes where, for example, Nat is whipped while tied to a cross.

The most unforgivably overt imagery, however, has to be Nat's recurring visions of a black woman, who seemed to be his wife, dressed as an angel and floating in a white netherworld of holiness. More than anything, it looked startlingly fake in a movie otherwise given to extreme realism: the angel's wings looked like they were bought from Party City.

The Birth of a Nation is a testament to the prodigious skill of all parties involved in its making, but there are many noticeable flaws that prevent me from proclaiming it a masterpiece. At any rate, as I watched Nat Turner take his stand at the head of a determined, if ragtag, group and yell "Rebel!" to the heavens, all I could think of was "For Frodo!" and how Aragorn did it better.

Solution to Crossword
from page 5

A	T	B	A	T		C	L	A	W		S	T	U	B
R	E	A	C	H		L	I	M	A		T	A	P	E
M	A	L	T	A		E	V	E	R		I	R	O	N
		K	I	N	G	F	E	R	D	I	N	A	N	D
				K	I	S	S		E	G	G			
S	C	H	I	S	M		O	M	N	I		U	M	A
L	O	O	M		M	O	N	A		V	A	N	E	S
O	C	T	O	B	E	R		T	W	E	L	F	T	H
P	O	L	K	A		Z	I	T	I		M	I	R	E
S	A	Y		C	L	O	D		L	I	S	T	E	N
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Q	U	E	E	N	I	S	A	B	E	L	L	A		
U	S	E	D		T	O	D	O		A	I	L	E	D
I	D	L	E		E	R	G	O		N	A	M	E	D
P	A	S	S		R	E	E	K		D	R	A	G	S

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Skipper and crew balance the boat

Yoder '19 appreciates intricacies involved in competitive sailing

Sailing, from Page 16

training sessions. They practice drills that focus on particular maneuvers and techniques.

Some skills, like starting, are incredibly crucial during a race, so it's important to have these methods down pat. Weight, wind conditions, and a variety of other factors are important to consider during a competition and understanding the tactics for handling them can have a major impact on performance.

Now that you know the basics behind the sport and what goes into it, support the Engineers at their next competition. They will be hosting the Firefly and FJ Invite this coming weekend on the Charles and will be competing in the Oberg Trophy hosted by Northeastern the weekend after.

Solution to Sudoku

from page 5

7	8	6	4	1	3	9	2	5
9	5	2	6	8	7	4	3	1
3	1	4	5	9	2	8	7	6
1	2	5	7	4	8	3	6	9
4	6	9	3	2	1	7	5	8
8	3	7	9	5	6	2	1	4
6	4	8	2	7	5	1	9	3
2	9	3	1	6	4	5	8	7
5	7	1	8	3	9	6	4	2

Solution to Techdoku

from page 5

1	2	3	5	4	6
6	1	2	4	3	5
5	6	1	3	2	4
4	5	6	2	1	3
3	4	5	1	6	2
2	3	4	6	5	1

Seven-game winning streak part of team's early success

Struckmann '18, Apostol '19, Berzolla '20, and Reilly '20 have produced 19 goals and 12 assists

Women's soccer, from Page 16

year, she transitioned to a brand new team, New York SC.

Reflecting upon her experience, she said, "I played there for six years and it was great."

Meanwhile, Apostol started playing recreationally at age five, but joined a competitive club soccer team at age eight. In high school, she played in a national league, culminating in a national title her sophomore year of high school.

Similarly, Struckmann started playing recreational soccer when she was five years old and joined her first club team when she was eight. She continued to play on the same club team, Sereno SC, for eight years before graduating high school and playing for MIT.

This year, Struckmann is an upperclassman on a younger team, so she feels responsible for the mindset of the team during games and practices.

"We have some really talented younger players who have stepped into big roles for the team early on, and so the it has been the job of the older girls to get them on the same page as the rest of the team tactically and make sure they feel comfortable being a presence on the field," she said.

Last year, the the women's soccer team had a record of 11-6-3, and suffered a heartbreaking loss in the NEWMAC semifinals, losing to Springfield in penalty kicks. This year, they are determined to bring home the gold.

"One of our biggest [team goals] is to not lose two games in a row, and so far we haven't,"said Reilly.

Last week, the Engineers celebrated victories over two NESCAC teams, both 1-0 victories of one over Tufts and Bowdoin.

As the season progresses, the team remains steadfast on its primary target: fulfill the NEWMAC preseason prediction of winning the league.

Apostol noted, "As one of the best teams in the league who is constantly winning the regular season, we are due for a tournament win."

For Struckmann, with only one more season left after this, she is determined to make every game count, so that the team can win the NEWMAC tournament and make it to the Sweet 16 of the NCAA.

In addition, due to the roster size of 31 players, the practices are intense and include friendly competition to improve each other's skills.

Apostol added, "Because there are so many players on the team, you have to work every single day in order to earn playing time on the field, [which] pushes us all to become better players and stay focused 100 percent of the time."

The MIT mindset of working hard translates really well onto the field.

Reilly stated, "We have limited time for practice [because we put academics first], but everyone is so focused, meaning that practices are productive."

Despite prioritizing academics, the girls agree that being able to play on MIT's soccer team has incorporated a necessary balance in their daily schedule, and definitely enhanced their MIT experience thus far. Soccer provides a stress outlet, a support system, and above all, a solid foundation of best friends on and off the field.

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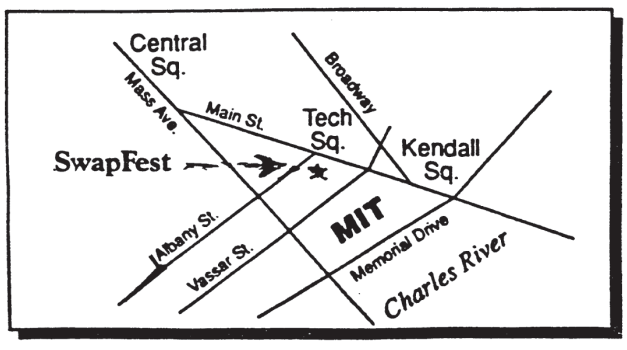

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